

# Wildlife Diversity News

*A Publication of the Iowa DNR Wildlife Diversity Program*

## WDP Awards and Recognitions



Mary Grapperhaus with the Illinois Department of Natural Resources has contributed to the success of the Keokuk Bald Eagle Appreciation Days since its inception in 1985.

Through many years of budget trials and tribulations with her agency, Mary always contributed her talents to

Longtime WDP Technician Pat Schlarbaum recently recieved the Olav Smedal Conservation Award. The award honors those who, by their actions or communications, have done the most to accurately present to the public of central Iowa excellence in the conservation of natural resources, the air, water, woods, wildlife, and soil; and outdoor pursuits representing the highest standards of ethics and sportsmanship.

Pat has played an important role in helping numerous species recover, both through his hands-on work and especially with his outreach efforts that have inspired hundreds of citizens to be more involved with wildlife conservation. Each year more and more people are inspired by Pat's work and passion for Wildness and Environmental Consciousness, and because of Pat's

the success of the event. Some years she came on her own when her agency cut spending. In 2013, Mary retired and she once again made the drive from her home in Peoria to assist with the event. She was presented with a plaque making her an honorary team member of the Iowa Wildlife Diversity Program. Mary's contributions are legendary and her commitment to environmental outreach are an inspiration to all of us in the Iowa Wildlife Diversity Program.

*- Pat Schlarbaum,  
WDP Technician*



From left to right: Carl Kurtz, Mike Meetz, Pat Schlarbaum, and Susan Franzen

influence many more people are now preaching the gospel of conservation, too.

Mike Meetz presented Pat with this Award on Pat's radio program on KHOI Community Radio. The Wildlife Diversity Program has benefited from Pat's dedication to conservation for 29 years, and this is indeed a well-deserved honor!

*- Bruce Ehresman,  
WDP Biologist*

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*Edited by Julia Dale*

## News From the Frog Pond



Wildlife management in the United States is mostly based upon the North American Model of Conservation, which states that wildlife is held 'in trust' for all the people of the country, not just a few. This differs from the European model where usually the landowner owns the wildlife on the property. There are seven basic tenets of the North American model and while they were perhaps developed with all wildlife in mind, they have typically been applied to birds and mammals. Nationally, there have been discussions recently as to whether the seven tenets would also work for amphibian and reptile management. The Wildlife Society has a publication reviewing the North American Model as a whole. You can access that document here: <http://wildlife.org/documents/technical-reviews/docs/North%20American%20model%20of%20Wildlife%20Conservation.pdf>

Below are the seven tenets. Do you think they apply to amphibians and reptiles today? What about insects or even plants?

1. Wildlife Resources are a Public Trust. This means that wildlife are not owned by any individual but are a resource to be managed for present *and* future generations.
2. Markets for Game are Eliminated. This tenet is in response to the unregulated markets in the early 19th century that led to the population crashes of many species of birds and mammals. There are

still commercial markets for game (think furbearers) but these are usually heavily regulated to prevent population crashes.

3. Allocation of Wildlife is by Law. Democratic government and public input ensures that all U.S. citizens in good standing have access to wildlife, not just a select few. Only surplus animals can be removed from a population – the population must be managed to ensure there are surplus animals available.
4. Wildlife Can Be Killed Only for a Legitimate Purpose. This means that animals are not killed and left unused and that the policy of fair chase is used.
5. Wildlife is Considered an International Resource. This recognizes that wildlife move across country borders as well and that countries need to work together to ensure the conservation of species.
6. Science is the Proper Tool to Discharge Wildlife Policy. Surveys and research studies inform wildlife policy.
7. Democracy of Hunting is Standard. This is one of the tenets that sets the U.S and Canada apart from many other nations – the idea that all citizens can have the ability to enjoy wildlife.

There are on-going discussions today about whether the Model is still relevant in the U.S., whether it adequately reflects the needs and conditions of all wildlife, and whether it should be changed. If you are not familiar with the model, I encourage you to read about it and decide what you think given your taxonomic interest.

- Karen Kinkead,  
WDP Coordinator



## Looking Back 25 Years After Peregrine Reintroduction in Iowa

In the mid-1960's, Peregrine Falcons were disappearing from the Mississippi flyway, and within a few years they would be wiped out from the foothills of the Rockies to the East Coast. The final blow for Iowa came in 1965 when a pair of falcons did not return to Capoli, a historic cliff nesting site in northeast Iowa. This was the last falcon nest in the Midwest. The rapid decline of the Peregrine Falcon can be traced to DDT, an insecticide that was widely used after World War II. Once in the food chain, DDT became progressively more concentrated due to bioaccumulation. As a result, species at the top of the food chain, like Peregrine Falcons and Bald Eagles, had their reproduction severely affected. By 1965, falcons were gone and our national symbol, the Bald Eagle, was in dire straits. Fortunately, DDT was banned in 1973 and the Endangered Species Act was enacted to assist in the recovery of many wildlife species.

**Check the DNR's website for live streams of Falcon Nests in Davenport and Des Moines**

In 1989, the Iowa DNR Wildlife Diversity Program, along with many volunteers, initiated falcon releases in Cedar Rapids. The goal was to establish ten nesting pairs in Iowa, and a total of 50 falcons were released at Cedar Rapids, Des Moines and Muscatine. Of these initial birds, two pairs of falcons successfully nested in 1993 in Des Moines and Cedar Rapids. As other states followed suit, urban-nesting falcon numbers grew around the Midwest. However, re-colonizing the historic cliff sites like Capoli was more difficult.

In order to meet recovery goals, more peregrines were released. An Iowa Peregrine Falcon Recovery Team was formed in 1995 with the goal of establishing a self-sustaining peregrine population nesting at the historic cliff-face eyries of the Mississippi River. In 1996, Bob Anderson relocated

One of the Capitol Falcons  
Photo: Pat Schlarbaum



his Raptor Resource Project from Minnesota to Ridgeway, Iowa. Bob and his project released four fledgling falcons along cliffs of the Upper Iowa River near Bluffton in 1997. After this successful release, Bob partnered with the National Park Service and the Iowa DNR to release an additional 19 falcons over several years at Hanging Rock in Effigy Mounds National Monument. Iowa Falconers Association members Lowell Washburn and Tom Deckert emulated Bob's success and gradually released 40 falcons from a cliff near Dubuque. Washburn also released 25 in Mason City, and Jim Haack of MidAmerican Energy released 15 at the Louisa Generating Plant. All told, 164 peregrines were hacked from Iowa release sites from 1989–2002.

In 2000, for the first time in about 40 years, five pairs of peregrines were documented nesting on the cliffs of the Mississippi River. Several of these falcons were identified as originating from Iowa releases or nests. In 2013, 15 territories were active and 13 successful nests produced 31 young around Iowa. Thanks to a vast number of citizen scientists and volunteers who spearheaded the recovery of Peregrine Falcons in Iowa, this fascinating species has successfully returned to the state.

- Pat Schlarbaum,  
WDP Technician



## Diversity Dispatch

### Breaking News in the Wide World of Wildlife

Spotted Eagle Ray  
Photo: Telegraph UK



#### One Third of Sharks and Rays Threatened

A recent analysis of cartilaginous fishes has found that only one-third of these species are considered safe. The other two-thirds fall into threatened, endangered, or insufficient data categories. Much of the threat to sharks and rays can be traced to overfishing, both directly and as bycatch. There is high demand for meat, oil and gillrakers of sharks and rays, especially in Asian countries where shark fin soup is a delicacy. Habitat destruction is considered to be another important factor in the decline of these species.

#### West Nile Virus Implicated in Bald Eagle Deaths

Over 50 Bald Eagles have died in Utah after eating Eared Grebes infected with West Nile Virus. Sick eagles were discovered in a five-county area over the last month. Nearly 20,000 Grebes were estimated to have died from the virus this year, and the Eagles became infected after scavenging their remains. Once the migrating Grebes left the Great Salt Lake area, the number of sick Eagles dropped. The overall population of Bald Eagles in Utah likely will not suffer as a result of the deaths.

<http://www.sltrib.com/sltrib/news/57412596-78/utah-virus-eagles-grebes.html.csp>

#### Endangered Bird may Benefit from Hurricane

Over a year ago, Hurricane Sandy caused massive damage to the East Coast. Now, Piping Plovers have the storm to thank for new habitat. Sandy expanded dunes on Long Island and created three new inlets which provide suitable feeding and nesting habitat for the endangered shorebird. While two of the inlets have been filled in, researchers are hoping that the third remains untouched. The aftereffects of the hurricane have also improved water and fisheries quality.

<http://www.sciencedaily.com/releases/2014/01/140128103121.htm>

Piping Plover Photo: USFWS



River Dolphin Photo: Nicole Dutra

#### New River Dolphin Species Discovered

Scientists have discovered a new species of River Dolphin in the Araguaia River basin in Brazil. Of the five living species of River Dolphins, the new discovery is most closely related to the Amazon River Dolphin, from which it diverged over two million years ago. There are estimated to be as few as 1,000 Araguaia River Dolphins in the wild. In 2006, an Asian cousin, the Baiji, is believed to have become extinct due to overfishing and damming of the Yangtze River.

<http://www.bbc.co.uk/news/science-environment-25841135>

## Amphibians Beneath Our Feet

The world of amphibians is not limited to above-ground habitat. There are three Iowa natives that live out most of their lives underground, including the Tiger and the Smallmouth Salamanders and the Plains Spadefoot Toad. These species spend most of the year in burrows they dig themselves or in the abandoned holes of other small animals. They remain underground until they migrate to water to breed. They will also emerge during rainfall or very humid nights to feed. This makes one wonder how many of these ground dwellers we step over, never knowing they are there.

The Smallmouth Salamander is aptly named, as both its head and mouth are quite small. Its overall color is black or very dark brown with a grayish lichen-like pattern. They are late winter and spring breeders, and during this time they can be found under debris near ponds or river bottoms. The Tiger Salamander, which has been known to hybridize with the Smallmouth, is slightly larger than its cousin and is dull black or deep brown in color, dotted with yellow markings. It is a winter and very early spring breeder, and its preference for deeper water means that it should be found breeding in farm ponds throughout Iowa. The average burrow depth for both salamander species is half a meter (about 20 inches).

The Plains Spadefoot Toad is unique among the frogs of Iowa in that it has vertical pupils. Its general coloration is grayish or brownish with dark brown markings. The “Spadefoot” portion of their



Tiger Salamander: MSIM file photo

name refers to the tubercles on their hind feet that they use for digging backward into sand and soil as deep as a meter. As the name suggests, this frog is at home on the Great Plains and in areas with little water, where they are explosive breeders after heavy rainfall. Breeding can occur in one or two nights and tadpoles usually develop into young adults or metamorphs in two to three weeks.

Each of these species has breeding populations in Iowa. Destruction of wetlands and wooded lowlands has undoubtedly impacted the breeding success and overall survival of these species. The introduction of fish to previously fishless bodies of water greatly decreases the survivorship of the larva. Agriculture has also had an indirect impact on the success of the species, as pesticides leech into the soil and affect the surrounding water bodies. These chemicals impact the larval forms of amphibians and can lead to mass die-offs or deformities.

So remember-just because we do not see an animal on a day-to-day basis does not mean that our actions do not affect their life-cycle. Keeping our wetlands clean and preserved will benefit all Iowa wildlife.

*-Brent Rutter,  
MSIM assistant*



The author holds a Spadefoot Toad: MSIM file photo



## Species Spotlight— Black-billed Magpie

The Black-billed Magpie is a handsome, long-tailed, black and white member of the crow family. While it is known for being a bird of western North America, it has in recent years become a year-round resident of the Broken Kettle Grasslands Bird Conservation Area in Plymouth County. The American Crow and Blue Jay are the other two family members that call Iowa home and like its corvid cousins, Magpies are intelligent birds.



When Lewis and Clark first encountered Magpies in 1804 in South Dakota, they reported that these birds were very bold - and that they sometimes entered their tents or took food from their hands. Magpies learn quickly and can mimic calls of other birds and learn to imitate some human words. They also have the capacity to quickly go from being curious, bold, and boisterous to shy and secretive when danger is sensed.

It is unknown if Magpies nested in Iowa prior to Euro-American settlement, and there were only nine published reports of Black-billed Magpies in Iowa from 1820 to 1923. Following several “invasions” of Magpies from 1921 to 1936, the first documented nesting for this species happened in Bremer County in 1937 and 1938. Then it was not until 1997 that Bill Huser reported Magpies nesting in Plymouth County. Since that time, magpies have become permanent breeding residents at that site. The

nearest Magpie nesting population to Iowa is along the Missouri River in South Dakota, about 50 miles west of the Iowa nesting site.

Magpies are gregarious and form loose flocks throughout the year. Pairs stay together year-round, and mates are rapidly replaced if one is lost. Magpies often nest in cooperative groups, which results in more synchronous hatching and higher survival among the young produced. A unique feature of this species is that it builds very large domed nests. During a visit in February 2011, Scott Moats, Director of Stewardship for The Nature Conservancy of Iowa, pointed out a flock of at least five Magpies, as well as several used Magpie nests in plum thickets that lined the valleys of Broken Kettle Grasslands. One of the stick nests (built with twigs from a plum thicket) was about three feet tall and about two feet wide. It appeared that the nest had been added to for more than one year, with a second nest built atop the first one.

Another unique feature of Magpies is that they appear to have a mutually beneficial relationship with bison and other large ungulates. These birds historically followed Bison herds, from which they gleaned ticks and other insects. Magpies also took advantage of the presence of Plains Indians and often scavenged the carcasses of the hunted Bison. When Bison herds were methodically exterminated by humans in the late 1800s, magpies disappeared from many parts of its former North American range. Interestingly, Bison have been reintroduced by The Nature Conservancy to a portion of the Broken Kettle Grasslands Bird Conservation Area. Perhaps the presence of Bison will be a positive influence on Magpie survival at this site. One thing is for certain; Broken Kettle Grasslands Bird Conservation Area is the only place in Iowa where a person can view a Black-billed Magpie perched on the back of a Bison.

- Bruce Ehresman,  
WDP Biologist

**More information on Bird Conservation Areas can be found at:**

<http://www.iowadnr.gov/Environment/WildlifeStewardship/NonGameWildlife/Conservation/BirdConservationAreas>

## Wildlife in Winter— How Animals Fared in the “Polar Vortex”

For us humans, the January cold snap meant extra layers of warm clothes and cars failing to start, but what did it mean for Iowa’s wildlife? Most year-round residents are extremely well adapted to the cold, and many have evolved fascinating means of coping with freezing temperatures. Black-capped Chickadees fluff their feathers and eat huge amounts of food in order to regulate their body temperatures. Ruffed Grouse burrow in the snow for extra protection, and Wild Turkeys can survive inactive up to two weeks without food, according to the Wisconsin DNR. Many mammals develop thicker coats for the colder months, and our reptiles and amphibians spend the winter in a torpid state. For many, this means burrowing into the mud layer of ponds or deep into the soil. Some species, including the Spring Peeper, have evolved to produce enough glucose to act as a biological antifreeze, which allows them to weather the cold in leaf litter and other relatively unprotected spots.

Some species aren’t as prepared for a brutal winter. Carolina Wrens, for example, often don’t make it through the most frigid weather. According to The Nature Conservancy, the northernmost part of this southern native’s range often contracts after an especially cold winter, as many individuals die off. While some birders will be sad to see these bubbly birds disappear, they can take comfort in the fact that a significantly less benign species is likely to suffer as well. The Emerald Ash Borer, an invasive pest which has already decimated forests in much of the upper Midwest, may experience a slight decrease due to the cold. The University of Minnesota predicts that the dramatic



cold may have wiped out a large percentage of the beetle larvae. It would take a great deal more than a bit of cold to neutralize the threat, however, and the best to be hoped for in this situation is a little more time to prepare for massive tree loss.

Although extreme cold may make it tempting to try and give wildlife an extra helping hand, it is important to be familiar with effective and ethical practices for feeding wildlife during winter. Birds benefit most when your yard has good cover, liquid water, and appropriate food. To prevent the spread of disease, deer and other mammals should not be fed, nor should turkeys and pheasants. Birders and other wildlife watchers should be especially careful to minimize disturbance during cold spells, as any additional stress can be damaging under already trying conditions.

- Julia Dale

WDP Outreach Assistant

### SUPPORT CONSERVATION IN IOWA.

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**BUY A NATURAL RESOURCE PLATE.**

**22% of the original purchase price and 60% of the renewal fee for natural resource license plates go directly to the Wildlife Diversity Program.**

## WDP's Citizen Science Program Looks for Volunteers

During the 2013 survey season, the volunteers of the Volunteer Wildlife Monitoring Program (VWMP) gathered valuable data on several taxonomic groups throughout the state of Iowa. In 2013, the VWMP volunteers gathered and reported data on 21 species of Iowa's wildlife including Bald Eagles, Peregrine Falcons, Red-shouldered Hawks, Great Horned Owls, Great Blue Herons, and 15 species of Iowa's frogs and toads.

As we begin the 2014 monitoring season, we are confident that this year will be just as successful. As always, we will start off the year by hosting workshops throughout the state aimed at training anyone who is interested in becoming a VWMP volunteer. You can find the schedule for these workshops below or online at [www.iowadnr.gov/volunteerwildlifemonitoring/](http://www.iowadnr.gov/volunteerwildlifemonitoring/).

- Emily Kiefer  
VWMP Assistant

### 2014 Volunteer Wildlife Monitoring Workshop Schedule

#### **Bird Nest Monitoring Workshops**

- Saturday, March 8<sup>th</sup>, 2014. Water's Edge Nature Center in Algona, IA. 10:00am to 3:00pm.
- Saturday, March 15<sup>th</sup>, 2014. Elgin Public Library in Elgin, IA. 10:00am to 3:00pm.

#### **Frog and Toad Call Survey Workshops**

- Wednesday, April 16<sup>th</sup>, 2014. Prairie Heritage Center in Peterson, IA. 5:30pm to 9:00pm.

## Iowa Wildlife Action Plan Revisions Underway

In 2005, each state developed a proactive "Wildlife Action Plan" to conserve wildlife and natural places. When Congress mandated the development of these plans, they also required them to be fully reviewed, and, if needed, revised by 2015. This requirement helps to keep the action plans relevant and useful.

The Iowa Wildlife Action Plan was developed by a coalition of scientists, sports-men and -women, educators, conservationists and community members. The plan outlines actions to conserve wildlife and natural places, protecting clean air and water. Implementing the Plan is a coordinated effort; we can only be successful by working together in our communities. To better coordinate across many organizations and individuals, we have developed an Implementation Committee and several associated working groups and subcommittees, each with

representation from a variety of organizations, agencies, and communities.

Currently many of the subcommittees are meeting to review and revise their areas of responsibility for the Plan. The major areas of review are the taxonomic subcommittees reviewing the list of Species of Greatest Conservation Need for the state. This process involves reviewing the available data for all the wildlife species present in Iowa and prioritizing them by conservation need.

If you are interested in opportunities to review and comment on portions of revision, email Matt Stephenson, IWAP assistant, [Matt.Stephenson@dnr.iowa.gov](mailto:Matt.Stephenson@dnr.iowa.gov) or call (515) 432-2823 ext 117.

- Katy Reeder and Matt Stephenson,  
IWAP Coordinator and Assistant



## 2014 Grant Recipients Announced

The Wildlife Diversity Program provides two grant opportunities with the funding raised by the sale of Natural Resource License Plates. The Small Grants program, which has been in existence for many years, seeks to fund small research or education projects that benefit non-game wildlife. The Habitat Management Grants Program provides support for land management projects and practices that encourage wildlife diversity on the landscape.

In 2014, approximately \$25,000 was awarded to 8 (3 management grant + 5 small grants) partners. The successful Habitat Management Grants projects were:

**Harrison County Conservation Board:** The objectives of this project are to restore open oak woodlands, remnant prairie ridgetops, and restored prairie areas in the Loess Hills through removal of woody growth. This will enhance habitat for Species of Greatest Conservation Need in Harrison and neighboring counties.

**Des Moines County Conservation Board:** The objective of the project is to restore oak woodland on the Big Hollow Recreation Area in Des Moines County, IA. The restoration of the woodland involves removing invasive species and weed trees to improve species diversity and composition and promote oak regeneration. The federally endangered Indiana Bat (*Myotis sodalis*) is known to occupy woodlands in the vicinity.

**Mount Mercy University:** On Hawkeye Wildlife Area in Johnson County, Dr. Neil Bernstein will be documenting the impact of conifer removal from a sand dune formation on the microclimate, habitat succession and population of the state endangered Ornate Box Turtle (*Terrapene ornata*). The conifers stabilized the dune and were having a negative impact on some of the flora and fauna of the area. This is a very important area and a long-term study site for the turtles.

The five small research and education grants awarded were:

**Waldorf College:** Use of Restored Wetlands on an Agricultural Landscape by Eastern Tiger Salamanders. Dr. Paul Bartelt will be conducting surveys in 19 restored wetlands.

**Luther College:** Survey of Fitch's Elephanthopper, a rare piglet bug. Dr. Kirk Larsen will be conducting surveys to document the presence of this rare insect at a State Preserve.

**Fort Hays State University:** Space Use Patterns of Southern Flying Squirrel in Northeastern Iowa. Dr. Elmer Finck, Dr. Gerald Zuecker, and Elizabeth Bainbridge will be following Southern Flying Squirrels using radio-telemetry.

**Walnut Woods State Park:** Purple Martin Conservation and Study. Walnut Woods State Park will be installing Purple Martin nest boxes and providing public outreach for these birds and their needs.

**Habitat Selection of Ornate Box Turtles in Clayton County, Iowa.** Terry VandeWalle and Josh Otten will be following Ornate Box Turtles using radio-telemetry.

We will be accepting applications again in November, 2014.

- Stephanie Shepherd and Karen Kinkead,  
WDP Biologist and Coordinator



## Last Look



Matt Stephenson captured this photo of a drop-tine buck near the Boone Wildlife Research Station. The animal had been spotted periodically in the area for months, and could be reliably found on McCoy WMA in mid January, much to the chagrin of area hunters.

## Upcoming Events

### Great Backyard Bird Count

February 14-17; <http://gbbc.birdcount.org>

### Bald Eagle Days:

Gray's Lake, Des Moines; Feb. 14

515-237-1386

Effigy Mounds; February 22

563-873-3491

Saylorville; February 23

515-276-4656

O'Brien County; March 1

712-295-7200

Sioux Rapids; Mar. 22

712-296-4920 or 712-295-7200

### Volunteer Wildlife Monitoring Events:

Birds; March 8 & 15

Frogs and Toads; April 16

[www.iowadnr.gov/volunteerwildlifemonitoring](http://www.iowadnr.gov/volunteerwildlifemonitoring)

### Falcon River Trip

Harper's Ferry Community Center and  
Nobles Island, May 2-3

712-330-0526 or

[pat.schlarbaum@dnr.iowa.gov](mailto:pat.schlarbaum@dnr.iowa.gov)

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